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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Malcolm Bailey

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EXAMINER

ROGERS, DAVID A

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/561,104	Applicant(s) BAILEY, MALCOLM	
	Examiner DAVID A. ROGERS	Art Unit 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6,7 and 9-18 is/are allowed.
- 6) ☒ Claim(s) 1-4,8,19 and 20 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The applicant cites several references in their reply filed 28 August 2008; e.g., "The Measurement of the Slip Resistance of Floor Surfaces", "Theory and Practice of Lubrication Engineers". However, copies of these references, which were apparently known to the applicant upon the filing of the present application, have not been made of-record. The applicant is requested to file an information disclosure statement and provide legible copies of the aforementioned references.

Claim Rejections - 35 U.S.C. § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Laid Open Patent Application Publication JP 2001-1296239 to Yasushi *et al.*

Yasushi *et al.* discloses a portable surface friction testing apparatus comprising a body (20) having wheels (reference item 22) that contact the test surface (reference item 10). The underside of the portable surface friction testing apparatus comprises a slider (reference item 32) that induces friction between the test surface and the body. Yasushi *et al.* discloses that the body is "moved on the surface". Therefore, the portable surface friction testing apparatus must have "means for propelling the body" to an initial velocity.

With regard to claim 2 the front and aft wheels of the body (which is considered to be a "trolley") will inherently provide directional stability; i.e., the wheels will not allow the body to yaw as it travels. This is because of the overall width of the wheels (as seen in figures 2 and 3) and because any yaw movement would cause the body to fall off the test surface. The portable surface friction testing apparatus also has means to provide a predetermined pressure to the friction pads. This predetermined pressure would be constant as the body travels along the test surface.

Claim Rejections - 35 U.S.C. § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yasushi *et al.* as applied to claim 2 above, and further in view of German Patent Application DE 4201124 to Sellmaier.

Yasushi *et al.* teaches a portable surface friction testing apparatus having a friction pad having multiple points of contact. Yasushi *et al.* does not teach a portable surface friction testing apparatus having a friction pad with a single point of contact.

Sellmaier teaches that it is already known to provide a friction pad (reference item 4) forming a single point of contact between a body (reference item 1) and a test surface (reference item 5).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Yasushi *et al.* with the teachings of Sellmaier in order to use a friction pad having a single point of contact as this amounts to mere substitution of one known element (the friction pad of Yasushi *et al.*) for another known element (the fiction pad of Sellmaier) and where both pads perform identical functions and produce predictable results.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yasushi *et al.* and Sellmaier as applied to claim 3 above, and further in view of Japanese Laid Open Patent Application Publication JP 1276044 to Yamaguchi *et al.*

Yasushi *et al.* teaches a portable surface friction testing apparatus comprising a body having wheels that contact the test surface. Yasushi *et al.* teaches that the body is "moved on the surface". Therefore, the portable surface friction testing apparatus must have "means for propelling the body" to an initial velocity. Yasushi *et al.* does not teach the use of a ramp for providing the initial velocity.

Yamaguchi *et al.* teaches that the use of a ramp for providing an initial velocity across a test surface for the purpose of propelling a portable surface friction testing apparatus is known in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Yasushi *et al.* and Sellmaier with the teachings of Yamaguchi *et al.* in order to use a ramp for providing an initial velocity to a portable surface friction testing apparatus as this is a known way of providing a known, predictable initial velocity to a friction testing device.

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7. Claims 1-4, 8, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over “In situ measurement of sliding friction of floors: study for the optimization of check parameters” to Kirchberg *et al.*¹ in view of Yasushi *et al.* and the applicant's admitted prior art.

Kirchberg *et al.* teaches that a known portable friction testing apparatus was constructed as seen in figure B2. The portable friction testing apparatus has a body, wheels, and at least one slider on its underside to induce friction between the body and the test surface. A ramp is used as the means to accelerate the body. The body has a predetermined mass and a predetermined size. The final velocity at the end of the ramp will be constant and predetermined. Kirchberg *et al.* does not teach a portable friction testing apparatus where the wheels and the slider both remain in contact with the test surface during the test run.

Yasushi *et al.* discloses a portable surface friction testing apparatus comprising a body (20) having wheels (reference item 22) that contact the test surface (reference item 10). The underside of the portable surface friction testing apparatus comprises a slider (reference item 32) that induces friction between the test surface and the body. Yasushi *et al.* discloses that the body is “moved on the surface”. Therefore, the portable surface friction testing apparatus must have “means for propelling the body” to an initial velocity.

¹ An official translation of the Kirchberg *et al.* reference was provided to the applicant on 08 April 2008. Page numbers and/or line numbers will be referenced to the translation document.

In their arguments filed 28 August 2008 the applicant admits that it is known to use various portable surface friction testing apparatus parameters to obtain a final critical film thickness.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Kirchberg *et al.* with the teachings of Yasushi *et al.* and the admitted prior art in order to provide a portable surface friction testing apparatus having wheels and a slider in contact with a test surface as this configuration is already known and the configuration provides a known, predictable result of allowing the body to travel across the test surface so that the coefficient of friction can be determined.

With regard to the applicant's phrase the "wherein the dimensions of the at least one slider, the force on the slider and the speed of commencement of the test run are selected such that when the test surface is wet the hydro-dynamic critical film thickness developed is in the range of 1 to 3 μm " it is noted that the claimed size and shape does not structurally differentiate the applicant's device from the prior art. See also MPEP §2144.04 citing *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984) and also *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997).

With regard to claim 8 Kirchberg *et al.* teaches a trolley having a pair of forward wheels and a pair of aft wheels. However, the wheels are not taught as being locked to a common axel so that they turn simultaneously; i.e., they "improve" directional stability. Official notice is hereby taken that items (trolleys, toy cars, etc.) with wheels that are joined and locked to a common axle are well known and that the use of such an

arrangement on the Kirchberg *et al.*/Yasushi *et al.* device would have been an obvious modification in order provide a straight movement of the device.

Allowable Subject Matter

8. Claims 6, 7, and 9-18 are allowed. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Japanese Laid Open Patent Application Publication 2002-310890 to Tatsuya also teaches that it is known to provide a rolling friction testing device have wheels and a “slider” simultaneously in contact with the test surface.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 C.F.R. 1.136(a) will be calculated from the mailing

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date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID A. ROGERS whose telephone number is (571)272-2205. The examiner can normally be reached on Monday - Friday (0730 - 1600). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David A. Rogers/
Primary Examiner, Art Unit 2856